



NOAA in Your Backyard – The Caribbean

Educational Opportunities and Education/Outreach Specialists for Puerto Rico and the US Virgin Islands

NOAA in Your State – State by State Listings of NOAA Facilities and Programs

** A summary of NOAA facilities, staff, programs, or activities based in, or focused on, your state or territory.*

- <http://www.legislative.noaa.gov/NIYS/>

NOAA in the Caribbean – NOAA Data, News, and Current Research in the Caribbean Region

- <http://www.regions.noaa.gov/secar/index.php/noaa-in-the-caribbean/>

National Weather Service – School Visits, Forecast Office Tours, Student and Educator Resources

** The National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas.*

- **San Juan Weather Forecast Office (Carolina, Puerto Rico)** – www.weather.gov/sju
Contact: Ernesto Morales (Warning Coordination Meteorologist) – ernesto.morales@noaa.gov

National Estuarine Research Reserve System – Field Trips, Professional Development, Educator Resources

** The National Estuarine Research Reserves System protects more than 1.3 million coastal and estuarine acres in 28 reserves located in 22 states and Puerto Rico for purposes of long-term research, environmental monitoring, education and stewardship.*

- **National Website** – www.nerrs.noaa.gov and www.estuaries.noaa.gov
- **Jobos Bay Reserve (Puerto Rico)** – <http://www.drna.gobierno.pr/jbnerr/>
Contact: Ernesto Olivares Gómez (Education Coordinator) – eolivares@drna.pr.gov or olivaresernestodrna@gmail.com

National Marine Fisheries in the Caribbean – Student Opportunities, Laboratory Facilities, NOAA Scientists

** The NOAA Fisheries Service is dedicated to the stewardship of living marine resources through science-based conservation and management, and the promotion of healthy ecosystems. They have regional offices and several smaller field offices.*

- **National Website** – http://www.nmfs.noaa.gov/educators_students/education.html
- **Southeast Regional Office (St. Petersburg, FL):** http://sero.nmfs.noaa.gov/outreach_education/index.html
Contact: Amy Clark (Education Coordinator – Stennis Space Center, MS) – amy.clark@noaa.gov
Caribbean Operations Branch: http://sero.nmfs.noaa.gov/sustainable_fisheries/caribbean/
Contacts: Jose A. Rivera (Fishery Biologist – San Juan, Puerto Rico) – jose.a.rivera@noaa.gov and
Marlon Hibbert (Marine Scientist – St. Croix, USVI) – Marlon.hibbert@noaa.gov

Integrated Ocean Observing System (IOOS) – Curriculum, Real World Data, and Multimedia

** The Caribbean Coastal Ocean Observing System operates a network of observing assets including data buoys, coastal meteorological stations, vessels, instruments and radars. Data from these assets and value-added data products such as graphs and maps are provided free of charge to the general public on their website.*

- **National Website** – <https://ioos.noaa.gov/community/education/>
- **Caribbean Coastal Ocean Observing System (CariCOOS)** – <http://www.caricoos.org/drupal/>
Contact: Sylvia Rodriguez Abudo (Education and Outreach Coordinator) – rodriguez.abudo@upr.edu

National Sea Grant Program – Professional Development, Curriculum, Student and Educator Resources

** Sea Grant is a nationwide network of 32 university-based programs that conduct scientific research, education, training, and extension projects designed to foster science-based decisions about the use and conservation of our aquatic resources.*

- **Puerto Rico Sea Grant** – <http://seagrantpr.org/education/>
Contact: Lesbia L. Montero Acevedo (Education Coordinator) – lesbia.montero@upr.edu



Caribbean Tsunami Warning Program (CTWP) – *Tsunami and Seismic Data, Educator Resources, Student Opportunities*

* The CTWP office supports an increased capability of the tsunami warning system for the Caribbean and Adjacent Regions. This includes the observational system (sea level, seismic and GPS) and the continued enhancement of tsunami outreach and education capacity, including the implementation of the TsunamiReady® (US) and Tsunami Ready (International) Programs.

- **Located in Mayagüez, Puerto Rico** - <https://www.weather.gov/ctwp/>
Contact: Christa G. von Hillebrandt-Andrade (Manager) – christa.vonh@noaa.gov

National Hurricane Center (NHC) – *Educator and Student Resources, Tours, Hurricane Information and Data*

* The mission of the NHC is to save lives, mitigate property loss, and improve economic efficiency by issuing the best watches, warnings, forecasts, and analyses of hazardous tropical weather and by increasing understanding of these hazards.

- **Located in Miami, FL** - <http://www.nhc.noaa.gov/outreach/>
Contacts: Daniel Brown (Senior Hurricane Specialist/Warning Coordination Meteorologist) - daniel.p.brown@noaa.gov and Dennis Feltgen (Public Affairs Officer) - dennis.feltgen@noaa.gov

Caribbean Atmospheric Research Center ("Atmos Carib") – *Satellite Data, Forecasts, Local Climatology*

* Atmos Carib is affiliated with the National Climate Data Center and aims to offer the most comprehensive weather and climate information for the Caribbean Region.

- **Located in Mayagüez, PR** - <http://atmos.uprm.edu/index.php>
Contact: Amos Winter (Puerto Rico Climatologist) – amos.winter@upr.edu

Cooperative Institute for Marine and Atmospheric Studies (CIMAS) – *Student Opportunities, Data, Laboratories*

* CIMAS is a cooperative institute between NOAA and several universities to bring together the research resources of the partner universities with those of NOAA in order to develop a center of excellence that is relevant to understanding the Earth's oceans and atmosphere within the context of NOAA's mission.

- **CIMAS at the University of Puerto Rico (Mayagüez, PR)** - <http://www.ci-mas.org/education.html>
Contact: Richard Appeldoorn (Caribbean Point of Contact) - richard.appeldoorn@upr.edu

Local NOAA Vessels – *Follow Current Science in the Caribbean Region*

- **NOAA Teacher at Sea** (follow teacher blogs onboard the ships) - <http://teacheratsea.noaa.gov/>
- **NOAA Ship Pisces (Pascagoula, MS)** - <https://www.oma.noaa.gov/learn/marine-operations/ships/pisces>
- **NOAA Ship Oregon II (Pascagoula, MS)** - <https://www.oma.noaa.gov/learn/marine-operations/ships/oregon-ii>
- **NOAA Ship Gordon Gunter (Pascagoula, MS)** - <https://www.oma.noaa.gov/learn/marine-operations/ships/gordon-gunter>
- **NOAA Ship Nancy Foster (Norfolk, VA)** - <https://www.oma.noaa.gov/learn/marine-operations/ships/nancy-foster>

Southeast Data Resources – *Historical and Real-Time Data*

- Puerto Rico Wave Models – http://www.srh.noaa.gov/sju/?n=marine1_models
- Puerto Rico Drought Monitor – <http://waterwatch.usgs.gov/?m=real&r=pr&w=map>
- Experimental Beach Forecast – <https://www.weather.gov/sju/beach>
- Buoy Observations and Tides – https://www.weather.gov/sju/marine_obs_tides
- River Forecast Data – <http://water.weather.gov/ahps2/index.php?wfo=sju>
- Puerto Rico Threatened and Endangered Species – http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/puerto_rico.pdf
- Ocean Observation System Buoy Data – http://www.caricoos.org/drupal/caricoos_buoys
- Invasive Lionfish Facts/Media – <http://oceanservice.noaa.gov/education/stories/lionfish/factsheet.html>
- Caribbean Offshore Marine Forecasts – <http://www.nhc.noaa.gov/marine/offshores.php>
- Caribbean Sea Ocean Buoy Data – <http://www.ndbc.noaa.gov/>
- National Hurricane Center Data Archive – <http://www.nhc.noaa.gov/data/>
- Ocean Prediction Center (Atlantic) – http://www.opc.ncep.noaa.gov/Atl_tab.shtml
- Caribbean Environmental Response Mapping Tool (oil spills, ship groundings) – <http://response.restoration.noaa.gov/maps-and-spatial-data/environmental-response-management-application-erma/caribbean-erma.html>

Local Weather Events – *Local Historical Weather Data*

- Whispering Trades Newsletter – http://www.weather.gov/sju/the_whispering_trades
- Enso effects across the northeastern Caribbean - http://www.weather.gov/sju/climo_enso
- Top Wettest and Driest Years - <http://www.weather.gov/media/sju/climo/stats/TopYears.pdf>
- NOAA Extreme Weather Information Sheet – Puerto Rico - <http://www.regions.noaa.gov/secar/wp-content/uploads/2013/06/Puerto-Rico.pdf>
- NOAA Extreme Weather Information Sheet – US Virgin Islands - <http://www.regions.noaa.gov/secar/wp-content/uploads/2013/06/Virgin-Islands.pdf>